

A

The '031 Patent vs. SPEZYME® ETHYL

SPEZYME® ETHYL

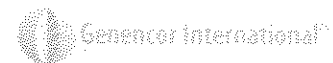
April 2004 - SPEZYME® ETHYL first sold (FF51)

May 2004 - Genencor wins RPBG Contract
(LeFebvre, Tr. 621:7-13; TE 507)

Oct. 2004 - Genencor wins 50% ICM
Contract (LeFebvre, Tr. 621:14-23)

'95	2003	2004	2005
<p>March 29, 1995 - Priority date of '031 Patent (FF20-23; TE 101)</p> <p>July 29, 2003 '031 claims rejected (FF27; TE 101 at 579-589)</p> <p>Jan. 14, 2004 Novozymes responds to rejection (FF38; TE 101 at 593-597)</p> <p>Apr. 16, 2004 '031 claims rejected again (TE 101 at 677-687)</p> <p>July 2004 Novozymes obtains samples of SPEZYME® ETHYL (FF43; TE 516)</p> <p>Aug. 11, 2004 Novozymes determines SPEZYME® ETHYL has Suzuki deletion (FF43; Borchert, Tr. 377:24-378:25; TE 516)</p>		<p>Sept. 29, 2004 - Issue fee paid for '031 Patent (FF49; TE 101 at 763)</p> <p>Sept. 7, 2004 - Novozymes submits revised '031 claims and Borchert 132 Declaration (FF46; TE 101 at 693-716; TE 508)</p> <p>Sept. 3, 2004 - Borchert and Garbell attend Examiner Interview (FF45; TE 101 at 758-759)</p> <p>Aug. 27, 2004 - Borchert submits declaration (in co-pending Interference) re: Machius '95 (FF94; Borchert, Tr. 368:11-372:3; TE 524 at 13 ¶¶ 38 and 39)</p>	<p>March 15, 2005 - '031 Patent Issues; Complaint filed. (FF50; TE 100 at 1; Complaint, D.I. 1)</p>

Prosecution of '031 Patent



B

The '031 Patent vs. Machius '95

March 13, 1995 - Machius '95 published (FF60; TE 173)

1995 - Machius lectures at Novozymes
(FF87; Borchert, Tr. 361:16-362:19; Machius, Tr. 468:20-469:1)

1996 - '031 inventors cite Machius '95 in presentation
(FF88; Borchert, Tr. 361:16-363:19; TE 664)

Sep. 27, 1997 - Novozymes relies on Machius
'95 in other prosecution (FF89; Borchert, Tr.
363:6-365:1; TE 664 and 665)

Novozymes Knows Machius '95

Jan. 14, 2005 - Examiner cites
Machius '95 in other
prosecution (FF99; Garbell, Tr.
430:9-431:12; TE 677)

'95	'96	'97	'98	'99	'00	'01	'02	2003	2004	2005
-----	-----	-----	-----	-----	-----	-----	-----	------	------	------

March 29, 1995 -
Priority date of '031 Patent
(FF20-23; TE 101)

Dec. 19, 2001
'031 application filed
(FF20; TE 100 and 101)

'031 claims rejected - **July 29, 2003**
(FF27; TE 101 at 579-589)

Novozymes responds to rejection - **Jan. 14, 2004**
(FF38; TE 101 at 593-597)

'031 claims rejected again - **Apr. 16, 2004**
(TE 101 at 677-687)

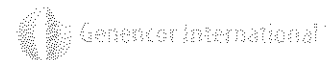
Sept. 29, 2004 - Issue fee paid for
'031 Patent (FF49; TE 101 at 763)

Sept. 27, 2004 - Borchert deposed re:
Machius '95 (in co-pending Interference)
(FF94; Borchert, Tr. 368:25-369:5)

Sept. 3, 2004 - Borchert and Garbell attend
Examiner Interview (FF45; TE 101 at 758-
759)

Aug. 27, 2004 - Borchert submits declaration
(in co-pending Interference) re: Machius '95
(FF94; Borchert, Tr. 368:19-372:3; TE 524 at 13
38 and 39)

Prosecution of '031 Patent



C

Westlaw.

417 F.Supp.2d 580

Page 1

417 F.Supp.2d 580

(Cite as: 417 F.Supp.2d 580)

H

Briefs and Other Related Documents

Only the Westlaw citation is currently available.

United States District Court,D. Delaware.

ESPEED, INC.; Cantor Fitzgerald, L.P.; and CFPH,
L.L.C., Plaintiffs,
v.

BROKERTEC USA, L.L.C.; Garban, L.L.C.; OM
Technology AB; and OM Technology (US), Inc.,
Defendants.

No. Civ.A.03-612-KAJ.

Feb. 22, 2006.

Background: Owner of patent for electronic trading platform used in trading government securities sued competitor for infringement. Competitor counterclaimed that patent was unenforceable, and that suit was barred by laches.

Holdings: The District Court, Jordan, J., held that:

18(1) patent was unenforceable;

21(2) suit was not barred by laches; and

23(3) award of attorney fees was not warranted.

Ordered accordingly.

See also 404 F.Supp.2d 575.

[1] Patents 291 ↩97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Duty to prosecute patent applications with candor,

good faith, and honesty extends to both applicants and their attorneys. 37 C.F.R. § 1.56.

[2] Patents 291 ↩97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases

"Inequitable conduct," such as would render patent unenforceable, includes affirmative misrepresentation of material fact, failure to disclose material information, or submission of false material information, coupled with intent to deceive.

[3] Patents 291 ↩97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases

Party alleging patent's unenforceability due to inequitable conduct must prove it by clear and convincing evidence.

[4] Patents 291 ↩97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases

To prove inequitable conduct from failure to disclose material prior art, party contesting patent's enforceability must offer clear and convincing proof of: (1) prior art or information that is material; (2) knowledge chargeable to applicant of that prior art or information and of its materiality; and (3) failure of applicant to disclose art or information resulting from intent to mislead Patent and Trademark Office.

[5] Patents 291 ↩97

291 Patents

417 F.Supp.2d 580
(Cite as: 417 F.Supp.2d 580)

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Party alleging patent unenforceability due to
inequitable conduct must show that
misrepresentation or withholding of information
meets thresholds of both materiality and intent, after
which court must engage in careful balancing: when
misrepresentation or withheld information is highly
material, lesser quantum of proof is needed to
establish requisite intent while, conversely if
information is less material, greater proof of intent
is required.

[6] Patents 291 ¶97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Prior art reference withheld by patent applicant is
not immaterial, for purpose of establishing
inequitable conduct, simply because claims are
eventually deemed by examiner to be patentable
thereover.

[7] Patents 291 ¶97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Intent to deceive patent examiner, such as would
render patent unenforceable on ground of
inequitable conduct, need not be proven by direct
evidence; it is most often proven by showing of acts
whose natural consequences are presumably
intended by actor.

[8] Patents 291 ¶97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
While materiality of withheld prior art reference
does not presume patent applicant's intent, which is
separate and essential component of inequitable
conduct, materiality of reference may lead to

inference of intent.

[9] Patents 291 ¶97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Intent to deceive patent examiner, such as would
render patent unenforceable, cannot be inferred
solely from fact that information was not disclosed;
there must be factual basis for a finding of
deceptive intent.

[10] Patents 291 ¶97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Patent applicant's intent to deceive examiner,
rendering patent unenforceable, may be inferred
from materiality of affidavits, affirmative acts of
submitting them, their misleading character, and
inability of examiner to investigate facts.

[11] Patents 291 ¶97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Patent applicant's affirmative misrepresentations to
examiner are typically accorded relatively high
degree of materiality, from which intent may be
inferred, for purpose of determining patent's
enforceability; such inference is not required in
every case, however, even when misrepresentation
is in affidavit form.

[12] Patents 291 ¶97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings
Therein in General. Most Cited Cases
Inference of deceptive intent, and hence
unenforceability, may fairly be drawn from
patentee's lack of credible explanation for

417 F.Supp.2d 580
(Cite as: 417 F.Supp.2d 580)

nondisclosure of material information to patent examiner.

[13] Patents 291 ↪97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Failure of securities trading firm to disclose its prior computerized trading system when prosecuting patent for new system was inequitable conduct precluding enforcement of patent; prior system, though not publicly disclosed, had been used commercially by firm more than one year before patent application, it was highly material, as it embodied allegedly novel features of new system, and firm's claim that it did not occur to it to disclose system was unbelievable.

[14] Patents 291 ↪97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Commercial use of alleged prior art is public use, for purpose of determining whether patent applicant is required to disclose it to examiner, even if it is kept secret.

[15] Patents 291 ↪97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Patent applicant's duty of candor extends throughout patent's entire prosecution history. 37 C.F.R. § 1.56.

[16] Patents 291 ↪97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Inequitable conduct during prosecution of patent application can render unenforceable not only

claims of that patent, but claims that issue from related applications as well.

[17] Patents 291 ↪97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Inequitable conduct in patent application only renders unenforceable claims of later issued patents in same chain if such conduct is related to targeted claims of ultimately-issued patent or patents sought to be enforced.

[18] Patents 291 ↪97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Inequitable conduct by securities trading firm seeking patent for computerized trading system warranted finding that subsequent patent, based on continuation application, was also unenforceable; although previously withheld material prior art reference was disclosed, examiner was never advised of prior nondisclosure and, in fact, firm continued to make material misrepresentations about prior art with intent to deceive.

[19] Patents 291 ↪97

291 Patents

291IV Applications and Proceedings Thereon

291k97 k. Patent Office and Proceedings Therein in General. Most Cited Cases

Software patent applicant's misrepresentations as to capabilities of its prior art system were made with intent to deceive, even though applicant made prior system's code available to examiner; applicant's provision of over two thousand pages for material, without pointing out relevant portion that contradicted its assertions regarding functionality, was more consistent with intent to hide that to disclose.

[20] Patents 291 ↪289(2.1)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k289 Time to Sue

291k289(2) Laches

291k289(2.1) k. In General. Most

Cited Cases

To invoke the laches defense, patent infringement defendant must prove: (1) plaintiff delayed filing suit for unreasonable and inexcusable length of time from time plaintiff knew or reasonably should have known of its claim against defendant, and (2) delay operated to prejudice or injury of defendant.

[21] Patents 291 ⇌ 289(4)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k289 Time to Sue

291k289(2) Laches

291k289(4) k. Specific Period.

Most Cited Cases

Infringement suit brought less than one month after software patent issued was not barred by laches.

[22] Patents 291 ⇌ 325.11(2.1)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k325 Costs

291k325.11 Disbursements in General

291k325.11(2) Attorney Fees

291k325.11(2.1) k. In General.

Most Cited Cases

Prevailing party in patent litigation may prove existence of "exceptional case," for purpose of recovering attorney fees, by showing: inequitable conduct before Patent and Trademark Office, litigation misconduct, vexatious, unjustified, and otherwise bad faith litigation, frivolous suit or willful infringement. 35 U.S.C.A. § 285.

[23] Patents 291 ⇌ 325.11(4)

291 Patents

291XII Infringement

291XII(C) Suits in Equity

291k325 Costs

291k325.11 Disbursements in General

291k325.11(2) Attorney Fees

291k325.11(4) k. Award to

Defendant. Most Cited Cases

Award of attorney fees to prevailing patent infringement defendant was not warranted, even though case was exceptional, based on finding that patent was unenforceable due to inequitable conduct before Patent and Trademark Office; plaintiff's litigation counsel had acted professionally, and significant time and effort had been required to address meritless issues raised by defendant. 35 U.S.C.A. § 285.

Patents 291 ⇌ 328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited

Cases

Patents 291 ⇌ 328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited

Cases

Patents 291 ⇌ 328(2)

291 Patents

291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents

291k328 Patents Enumerated

291k328(2) k. Original Utility. Most Cited

Cases

4,903,201. Cited as Prior Art.

5,905,974. Cited.

6,560,580. Unenforceable.

Jack B. Blumenfeld, Julia Heaney, Morris, Nichols,

Arsht & Tunnell, Wilmington, DE, Hangley Aronchick Segal & Pudlin, Philadelphia, PA (David J. Wolfsohn, Aleksander J. Goranin, Shawn A. Weede, of counsel), Gary A. Rosen, Law Offices of Gary A. Rosen, P.C., Philadelphia, PA, for plaintiffs.

Richard L. Horowitz, David E. Moore, Potter Anderson & Corroon LLP, Wilmington, DE, Fried, Frank, Harris, Shriver & Jacobson LLP, New York City (James W. Dabney, Peter L. Simmons, Henry C. Lebowitz, of counsel), for defendants.

POST-TRIAL FINDINGS OF FACT AND CONCLUSIONS OF LAW

JORDAN, District Judge.

I. INTRODUCTION

Plaintiffs eSpeed, Inc., Cantor Fitzgerald, L.P., CFPH, L.L.C., and eSpeed Government Securities, Inc. (collectively, "eSpeed") brought this patent infringement action against Defendants Brokertec USA, L.L.C., Garban, L.L.C., OM Technology AB, and OM Technology (US), Inc. (collectively, "Brokertec"), accusing Brokertec of infringing claims 20-23 of U.S. Patent No. 6,560,580 B1 (the "'580 patent"). (First Amended Complaint, Docket Item ["D.I."] 512.) Brokertec counterclaimed for a declaratory judgment that the '580 patent was invalid, that Brokertec did not infringe the patent, that the '580 patent was procured by inequitable conduct, and that the suit was barred by laches. (Answer and Counterclaim, D.I. 520 at ¶¶ 1-55, 59, 65; Trial Transcript ["Tr."], Vol. 1 at 192.) The issues of infringement and validity were tried to a jury, and, on February 22, 2005, the jury returned a verdict finding that claims 20-23 of the '580 patent read on the accused Garban GTN system but that those claims are invalid because the patent fails to provide an adequate written description. (D.I. 643; Tr., Vol. 11, at 3014:12-3015:20.)

Concurrently with the jury trial, the parties tried the issues of inequitable conduct and laches to the court. (See Tr., Vol. 2 at 640-688; Tr., Vol. 3 at 998-1042.) The following are my post-trial findings of fact and conclusions of law, issued pursuant to Federal Rule of Civil Procedure 52(a). I have concluded that the '580 patent is unenforceable,

because it was procured by inequitable conduct. Further, although I find that this is an exceptional case under 35 U.S.C. § 285, I have concluded that an award of attorneys' fees is not warranted.

II. FINDINGS OF FACT

A. The Parties and the Patent

1. Plaintiffs eSpeed, Inc. and eSpeed Government Securities, Inc. are corporations organized under the laws of the State of Delaware, with their principal places of business in New York, New York. (First Amended Complaint, D.I. 512 at ¶¶ 2, 5.) Plaintiff Cantor Fitzgerald, L.P., is a limited partnership organized under the laws of the State of Delaware, having a principal place of business in New York, New York. (*Id.* at ¶ 3.) Plaintiff CFPH, L.L.C., is a limited liability company organized under the laws of the State of Delaware, having a principal place of business in New York, New York. (*Id.* at ¶ 4.)

2. Defendants BrokerTec USA, L.L.C. and Garban, L.L.C. are limited liability companies organized under the laws of the State of Delaware, having principal places of business in Jersey City, New Jersey. (Answer and Counterclaim, D.I. 520 at ¶¶ 77, 78.) OM Technology AB is a corporation organized under the laws of Sweden, with a principal place of business in Stockholm, Sweden. (*Id.* at ¶ 79.) OM Technology (US), Inc. is a corporation organized under the laws of the State of Delaware, having its principal place of business in New York, New York. (*Id.* at ¶ 80.)

3. The patent in suit is United States Patent No. 6,560,580 B1 (the "'580 patent"), issued on May 6, 2003 from United States Patent Application No. 09/294,526 (the "'526 application"), filed on April 20, 1999. (Plaintiff's Exhibit ["PX"] 1.)

4. The '580 patent claims priority from United States Patent Application No. 08/766,733 (the "'733 application"), filed December 13, 1996. (Defendant's Exhibit ["DX"] 42.) The '733 application issued as United States Patent No.

5,905,974 (the “ ’974 patent”) on May 18, 1999. (DX9.)

5. The ‘580 patent is owned by Plaintiffs Cantor Fitzgerald L.P. and CFPH, LLC, and Plaintiffs eSpeed and eSpeed Government Securities, Inc. are the exclusive licensees of the patent. (Stipulated Facts, Tr., Vol. 2 at 360:2-9.) Howard Lutnick, Bijoy Paul, and Stuart Fraser were the three named inventors on both the ‘580 and the ‘974 patents. (See DX9, the ‘974 patent, at 1; PX1, the ‘580 patent, at 1.) References herein to the “applicants” are to these three individuals.

B. The Market for U.S. Securities

6. To fund its operations, the federal government auctions United States treasury securities through the Federal Reserve Bank. (DX42, ‘733 Application at FN00001794.) The customers that buy these securities directly from the government are a group of large banks called “primary dealers.” (Lutnick, Tr., Vol. 2 at 389-91.)

7. Primary dealers resell the securities in the secondary wholesale market to other dealers, banks, insurance companies, pension funds, and finance companies, among others. (*Id.*)

8. eSpeed and Brokertec compete in the “interdealer brokerage” market, in which they provide brokerage services to primary dealers and other wholesale buyers and sellers of U.S. Government securities. (Cleaves, Tr., Vol. 4 at 1337; Lutnick, Tr., Vol. 2 at 370-73.) Interdealer brokers facilitate trading in the wholesale secondary market by communicating the prices at which the traders who work for the primary dealers are willing to buy and sell, matching the traders’ positions and consummating the trades. (Lutnick, Tr., Vol. 2 at 371-72; *see also* DX235 at 933-34.)

C. Trading Conventions

9. Market orders in the interdealer market for U.S. government securities include passive orders and aggressive orders. (Stipulated Facts, Tr., Vol. 2 at

360-61.) A passive order constitutes a binding commitment to buy or sell a given quantity of a security at a given price, which another trader can accept. (*Id.*) A passive order to buy a security is known as a “bid,” and a passive order to sell is known as an “offer.” (*Id.*)

10. An aggressive order accepts a previously made passive order, which results in a trade. (*Id.*) Accepting a pending bid is known as “hitting the bid,” and accepting a pending offer is known as “lifting the offer.” (*Id.*)

11. Until recently, trading of government securities has been conducted according to an “open outcry” method, otherwise known as “voice brokering,” in which securities were traded through an oral communication between brokers. (Lutnick, Tr., Vol. 2 at 370-71; *see also* DX42 (the ‘733 application) at FN00001795-96 (“[R]epresentatives of the customers [brokers] would communicate with each other to develop pricing and confirm transactions. This process employed the expression by the representatives of various bid and offer prices for the fixed income security at select volumes ... [through] the loud oral ‘cry’ of a customer-proposed bid or offer and the coordination with the fellow representatives regarding the extraction of complimentary positions-until a transaction match is made and a deal is done.”).)

12. This method of brokering was commonly supported by computers, which were used to enter information about deals that had already been made orally. (Lutnick, Tr., Vol. 2 at 373-375.) Cantor Fitzgerald used a computer support system known as the “Perkin-Elmer system,” which displayed information about the trades to the voice brokers. (Paul, Tr., Vol. 4 at 1083.)

D. Cantor Fitzgerald's Trading Systems

13. To support its securities trading activities, Cantor Fitzgerald decided to develop its own computerized system, known originally as the “Super System,” and later as the Cantor Fitzgerald Trading System (“CFTS”). This system had three

iterations.

1. CFTS 2.0/"Super System"

14. The Super System project was conceptualized in the late 1980s. (PX79 at ESP00006815 (noting that CFTS "was conceived in 1987").) At the outset, there was debate over whether the Super System should simply be an order entry system, capturing the details of voice deals, akin to the Perkin-Elmer System, or whether the system should be a fully automated electronic trading system that would perform the trades itself. (See Abuwala Dep., Tr., Vol. 6 at 1947 (noting the "ongoing debate" over whether the Super System would "continue the old tradition [of voice brokerage] and then reflect it in the system, or whether whatever was entered in the system, irrespective of who speaks, would be the arbiter"); Paul, Tr., Vol. 4 at 1092-1093 ("[A]re we going to build a trading system that basically makes the human beings irrelevant ... the system decides who to sell to, ... who the seller is, when these sellers should be selling ... or should we say no. This [sic] the system is not going to make the real decision ... The human beings are still going to make a decision. And they're simply going to key into the system what they did.").)

15. At first it was decided that the Super System would provide a platform to support both automated trading and traditional outcry trading. (PX33 at B002589 ("CFTS was designed with the following objectives in mind: Capture all trades: for 'on screen' and 'off screen' markets").) The designers stated that the system would "provide for automated workups" and "provide for a 'virtual pit', allowing participants outside of the trading floor to join a trade in real time[.]" (*Id.*) In addition, it would be used with the open outcry system and would require the brokers to enter in the details of the trades as they happened. (Paul, Tr., Vol. 4 at 1102:24-1103:20 (describing a transaction being conducted orally, and stating "[n]ow as the broker is doing this ... [t]he Super System wanted that guy, instead of writing it down on a piece of paper, wanted that individual to type in to the computer" the details of the trade).)

16. There were two problems with the Super System, however. First, as an automated trading system, it was slow, and could only handle six transactions per second. (*Id.* at 1096:1-3.) Second, the user interface was difficult to use while trading, and, accordingly, the "broker[s] simply ignored it." (*Id.* at 1101:18-1102:16.) Thus, because the Super System was regarded as a "failure," it was not used as an automated trading system, but as a trade capture system to support voice brokering. (Caro, Tr., Vol. 6 at 2081-83 (noting that trades were done orally, and contemporaneously entered into the Super System).) The shift to a trade-capture system was accomplished by adding a "go-around" command, which allowed brokers to "type in what was the total quantity transacted in the room." (Paul, Tr., Vol. 4 at 1104:12-20.)

17. Nevertheless, the Super System was designed to contain and in fact did contain various system states, including a "Bid/Offer" state, where passive bids and offers were entered into the system (Caro, Tr., Vol. 6 at 2108-09; DX52), a "When" or "Uncleared Bid/Uncleared Offer" state, where only customers showing a current bid or offer could hit or lift a corresponding bid or offer (PX33 at B002596), and a "Workup" state, where two parties in active trading could "workup" the size of their trade by increasing in increments the volume of the securities in the transaction. (Abuwala Dep., Tr., Vol. 6 at 1950-51; DX52.)

18. In that Workup state "[t]he rules that appl[ied] ... include[d] processing customers on a first come first served basis." (PX33 at B002594.) Thus, customers wishing to trade formed a queue, which indicated the order in which their actions would be processed. (*Id.*; see also Abuwala Dep., Tr., Vol. 6 at 1932-33.)

19. However, the Super System had two sets of rules, known as the "old" rules and the "new" rules. (PX33 at B002594.) An important difference between these sets of rules affected trading in the Workup state. (*Id.*) Under the old rules, during Workup, the first two participants in the trade were provided exclusivity by the Super System, which prevented the entry of other trades. (Abuwala Dep., Tr., Vol. 6 at 1951-54.) When one of these first two

417 F.Supp.2d 580

(Cite as: 417 F.Supp.2d 580)

participants signaled that he or she was “done” trading, the next customer in the queue could enter trading, and was provided with exclusive control. (*Id.* at 1956; PX33 at B002594 (“The old rules allow each customer exclusive control over the trade until they are ‘done’, at which time exclusive control passes to the next customer in sequential order.”).)

20. The Super System also contained an optionally enabled code that provided “new rules” of trading. (PX33 at B002594.) Under the “new rules,” to maintain exclusivity, a customer had to show a bid or offer of a certain minimum size. (*Id.* at B002594-95.) The “new rules” were designed to discourage customers from monopolizing trading, and to improve liquidity. (*Id.*)

21. In 1993, the Super System was used in two of the trading rooms at Cantor Fitzgerald, the Bills Room and the Canadian Room. (Fraser Dec., DX3 at ¶ 4.) It was used as an order entry system, to support open outcry trading. (*Id.* at ¶ 5.)

22. When later trading systems were developed, there was confusion among Cantor Fitzgerald employees as to how the Super System was related to these newer trading systems. (See Paul, Tr., Vol. 4 at 1119-21 (noting that the terms “Super System” and “CFTS” were “intermixed”).) In fact, eSpeed employees used the term “Super System” to refer not only to what I have described here as the Super System, but also to the abortive CFTS 3.0 system and to the systems which ultimately were the subjects of the '974 and '580 patents. (Lutnick, Tr., Vol. 2 at 485-87 (explaining that his use of the term “Super System” in an email (PX110) was a reference to the “1996, the cool system. I was not referring to the 1992 system ...”).) To avoid such confusion, the Super System was eventually assigned a “CFTS” version number, CFTS 2.0. (*Id.*)

2. CFTS 3.0

23. The first attempt to update the Super System, by creating a CFTS version 3.0, was a failure, and that version was never launched or used. (Paul, Tr., Vol. 4 at 1143-44.) Code was created, however, and that CFTS 3.0 code also contained the “new rules.”

(PX33 at B002594-95.)

3. CFTS 3.1

24. The next update was known as CFTS 3.1. It was rolled out in Cantor Fitzgerald's Long Bond Room during the week between Christmas and New Year's Day, at the end of 1995. (Paul, Tr., Vol. 4 at 1164-65.)

25. This system provided an automatic electronic trading system to replace the earlier methods of voice brokering. (Lutnick, Tr., Vol. 2 at 476-77.) Instead of calling out deals orally, brokers would input information, and the computer system would effect the trades. (*Id.* (“The system was doing the deals.”).)

E. Prosecution of the '974 patent

26. It is undisputed that the existence of the Super System was never disclosed to the Patent and Trademark Office (the “PTO”) during the prosecution of the '733 application. (See Fraser Dec., DX3 at ¶ 26; Paul Dec., DX23A at ¶ 20; Lutnick Dec., DX24 at ¶ 7.) While prosecuting the application for the '580 patent, the applicants claimed that it did not occur to them to disclose the Super System earlier, because it was “used only internally by [Cantor Fitzgerald] and was never publicly disclosed.” (See Fraser Dec., DX3 at ¶ 26; Paul Dec., DX23A at ¶ 20; Lutnick Dec., DX24 at ¶ 7.)

27. The '974 patent describes the data capture function of computers used in voice brokerage, which involved methods similar to those designed into the original Super System. (DX9, the '974 patent, at col. 3, Ins. 10-22.)

28. In procuring the '974 patent, the applicants argued to the United States Patent and Trademark Office (the “PTO”) that the inclusion of various “trading states” in the claimed invention, which left control of the trade with the trader, not a computer, overcame the prior art cited by the examiner. (See DX16 at FN00001865-66.)

29. For example, in response to an Office Action dated May 27, 1998, the applicants submitted an amendment to the patent, along with remarks. (DX16.) The examiner had rejected claims 1-30 of the application as anticipated under U.S. Patent No. 4,903,201 (the “Wagner” reference). (*Id.* at FN00001863.) The applicants responded by stating that the system in Wagner simply “accept [ed] bids and offers from traders” looking for a “match.” (*Id.* at FN00001865.) When the computer found a match, it “execute[d] the trade” without further input from the broker. (*Id.*) The applicants went on to distinguish the invention in the '974 patent by stating that the invention included “trading states” that did not simply match up bids and offers, but provided the opportunity for brokers to take particular actions. (*Id.* at FN00001865-66.) The applicants stated that “[t]he use of plural states for controlling trading is specifically provided in the last full paragraph of claim 1. This paragraph clearly differentiates the present invention that applies a protocol specific Trading State, from the prior art which merely matches bids and offers in a single state environment.” (*Id.* at FN00001866.)

30. The trading states on which the applicants relied in arguing that the invention of the '974 patent was novel included a “Bid/Offer State,” (DX9, the '974 patent, at col. 18, Ins. 29-30), a “Workup State” (*id.*), a “When” state (*id.* at 31-32), a “Second Look” state (*id.* at 33-34) and a “Workdown” state (*id.* at 35-36).

31. The Super System had also contained many of these same trading states, including a “Workup” state (PX33 at B002593-95), a “Workdown” state (*id.* at B002595), and an “Uncleared Bid/Uncleared Offer” state, which corresponds to the “When” state of the '974 patent. (*Compare id.* at B002596 with DX16 at FN00001864.) The Super System also appears to have contained a “Bid/Offer” state. (PX33 at B002592-93; Caro, Tr., Vol. 6 at 2108-09.)

32. Thus, with the exception of the “Second Look” state, the Super System contained all of the trading states contained in the '733 application and the '974 patent. The applicants relied on the existence of these states to overcome the examiner's rejection of

all of the claims of the '733 application. (DX16 at FN00001865-66.) These states were described in a document (PX33), and, whether used or not, were part of a system that was operating in two Cantor Fitzgerald trading rooms starting in 1993, more than 1 year before the filing date of the '733 application, which matured into the '974 patent. (Fraser Dec., DX3 at ¶¶ 4-5.)

33. The '974 patent was never disclaimed by eSpeed.

F. Prosecution of the '580 Patent

34. The '580 patent and the '974 patent are closely related, as the '580 patent is a continuation of the '733 application and claims subject matter similar to that claimed in the '974 patent. (*Compare* DX9, cols. 17-18 with PX 1 at col. 20 (similarity of claims); DX9 at cols. 1-3 with PX1 at cols. 1-3 (similarity of background).) Claims 20-23 of the '580 patent describe a method of trading on a distributed workstation computer system, and include trading states and various trading conventions. (DX288 at 00212, the '580 patent at col. 20, Ins. 4-57.) These claims relate closely to the claims of the '733 application, which describe a trading system, including trading states. (DX9, the '974 patent, at col. 18.)

35. The Super System was cited to the PTO for the first time during the prosecution of the '580 patent. (DX3 at ¶¶ 4-11; DX23A at ¶¶ 4-5; DX24 at ¶¶ 4-5.) Each of the applicants made a declaration disclosing the Super System, and stating that it had not occurred to them earlier to cite the Super System as prior art. (DX3 at ¶ 26; DX23A at ¶ 20; DX24 at ¶ 7.)

36. In these declarations, the applicants stated that the Super System contained only code for the “old rules” of trading, and did not contain “new rules” code. (DX3 at ¶ 21; DX23A at ¶¶ 11, 20.) The applicants did not disclose that the Super System contained code for a rule that would require a trader to show a certain size bid or offer to maintain exclusivity. (DX3; DX23A.) One of the declarations went so far as to specifically state that the Super System did not contain such rules. (DX3

at ¶ 21.)

37. Along with these three declarations, sixteen exhibits were submitted, (*see* DX288 at 00839), consisting of what was conceded to be “a lot of paper.” (Oral Arg. Tr., D.I. 668 at 45:7-8). In fact, over two thousand pages containing source code and manuals were submitted to the PTO, along with the inventors' declarations. (DX288.)

38. Several of these exhibits contained pieces of source code for the Super System, including some containing “new rules” code that limited exclusivity by requiring a customer to show a bid or offer of a certain size to maintain exclusivity. (*See* DX288, Exhibit B at 00872; PX33 at B002594-95.)

39. eSpeed does not now dispute that the Super System did, in fact, contain code for these “new rules.” (D.I. 668 at 44:6-7, 45:22-25.)

40. The system disclosed in the '580 patent limits exclusivity by allowing only the first two trading participants to trade exclusively. (DX288 at 00212, the '580 patent at col. 20, Ins. 20-30.)

III. CONCLUSIONS OF LAW

A. Inequitable Conduct

1. The Legal Standard for Inequitable Conduct

[1] 1. Patent applicants have a duty to prosecute applications in the PTO with candor, good faith, and honesty. *See Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co.*, 324 U.S. 806, 818, 65 S.Ct. 993, 89 L.Ed. 1381 (1945); *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed.Cir.1995). This requirement is embodied in 37 C.F.R. § 1.56, which states that “[e]ach individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” This duty extends to both applicants and their

attorneys. *FMC Corp. v. Manitowoc Co., Inc.*, 835 F.2d 1411, 1415 n. 8 (Fed.Cir.1987) (“ ‘Applicant’ as used here includes the patentee and the attorney who prosecuted the application that resulted in the patent-in-suit, because the knowledge and actions of applicant's attorney are chargeable to applicant.”).

[2] 2. “Inequitable conduct includes affirmative misrepresentation of a material fact, failure to disclose material information, or submission of false material information, coupled with an intent to deceive.” *Molins PLC*, 48 F.3d at 1178.

[3] 3. A party alleging inequitable conduct must prove it by clear and convincing evidence. *Molins PLC*, 48 F.3d at 1178.

[4] 4. To prove inequitable conduct from a failure to disclose material prior art, a party “must offer clear and convincing proof of: (1) prior art or information that is material; (2) knowledge chargeable to applicant of that prior art or information and of its materiality; and (3) failure of the applicant to disclose the art or information resulting from an intent to mislead the PTO.” *FMC Corp.*, 835 F.2d at 1415.

[5] 5. A party alleging inequitable conduct must show that “the withholding of information [meets the] thresholds of both materiality and intent.” *Molins PLC*, 48 F.3d at 1178. “[M]ateriality does not presume intent, which is a separate and essential component of inequitable conduct.” *Allen Organ Co. v. Kimball Int'l, Inc.*, 839 F.2d 1556, 1567 (Fed.Cir.1988). Once threshold levels of materiality and intent have been shown, a court must engage in “a careful balancing: when the misrepresentation or withheld information is highly material, a lesser quantum of proof is needed to establish the requisite intent, ... In contrast, the less material the information, the greater the proof must be.” *Purdue Pharma L.P. v. Endo Pharm.*, 438 F.3d 1123, 1128-29 (Fed.Cir.2006) (internal citations omitted).

a. Materiality

6. PTO regulations define what information is material to patentability. *See* 37 C.F.R. § 1.56;

417 F.Supp.2d 580

(Cite as: 417 F.Supp.2d 580)

Purdue Pharma L.P., 438 F.3d at 1128-30. Because both the '733 application and the '526 application were filed after March 16, 1992, I apply the current version of the PTO regulations. *Purdue Pharma L.P.*, 438 F.3d at 1128-29. These regulations state that "information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) It refutes, or is inconsistent with, a position the applicant takes in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability." 37 C.F.R. § 1.56(b) (1992).

7. However, "[t]his new standard was not intended to constitute a significant substantive break with the pre-1992 standard." *Purdue Pharma L.P.*, 438 F.3d at 1129, n. 6 (citing *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354, 1368 n. 2 (Fed.Cir.2003)). Under that older standard, information was deemed "material" when there was a "substantial likelihood that a reasonable examiner would have considered the information important in deciding whether to allow the application to issue as a patent." *Molins PLC*, 48 F.3d at 1179.

[6] 8. A reference is not "immaterial simply because the claims are eventually deemed by an examiner to be patentable thereafter." *Id.*

b. Intent

[7] 9. "Intent need not be proven by direct evidence; it is most often proven by a showing of acts, the natural consequences of which are presumably intended by the actor." *Molins PLC*, 48 F.3d at 1180.

[8][9] 10. Hence, while "materiality does not presume intent, which is a separate and essential component of inequitable conduct," *Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1352 (Fed.Cir.2002) (internal quotation marks and citation omitted), the materiality of a reference may lead to an inference of intent. *Bruno Indep. Living Aids, Inc.*, 394 F.3d at 1354 ("in the absence of a

credible explanation, intent to deceive is generally inferred from the facts and circumstances surrounding a knowing failure to disclose material information"). "Intent to deceive, however, cannot be 'inferred solely from the fact that Information was not disclosed'; there must be a factual basis for a finding of deceptive intent." *Purdue Pharma L.P.*, 438 F.3d at 1133-34.

[10][11] 11. Of particular relevance here, intent may be inferred "from the materiality of the affidavits, ... the affirmative acts of submitting them, their misleading character, and the inability of the examiner to investigate the facts." *Paragon Podiatry Lab., Inc. v. KLM Labs., Inc.*, 984 F.2d 1182, 1190 (Fed.Cir.1993). Affirmative misrepresentations are typically accorded a relatively high degree of materiality, from which intent may be inferred. See *Purdue Pharma L.P.*, 438 F.3d at 1133-34 ("This omission of information was material, but not as material as an affirmative misrepresentation would have been."); *Rohm & Haas Co. v. Crystal Chemical Co.*, 722 F.2d 1556, 1571 (Fed.Cir.1983) ("In contrast to cases where allegations of fraud are based on the withholding of prior art, there is no room to argue that submission of false affidavits is not material.") However "such an inference is not required in every case, even when the misrepresentation is in affidavit form." *Monsanto Co. v. Bayer Bioscience N.V.*, 363 F.3d 1235, 1241 (Fed.Cir.2004) (quoting *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1048 (Fed.Cir.1995)).

[12] 12. Additionally, where a party "has not proffered a credible explanation for the nondisclosure, ... an inference of deceptive intent may fairly be drawn in the absence of such an explanation." *Bruno Indep. Living Aids, Inc.*, 394 F.3d at 1354.

13. Brokertec asserts, and I agree, that inequitable conduct infected both the prosecution of the '733 application, leading to the issuance of the '974 patent, and the prosecution of the '526 application, leading to the '580 patent.

2. Inequitable Conduct during the Prosecution of

the '733 Application

[13] 14. The applicants for the '580 patent committed inequitable conduct during the prosecution of the '733 application by failing to disclose the existence of the Super System to the PTO.

a. Materiality of the Super System

15. The Super System is material prior art because it "refutes, or is inconsistent with, a position the applicant [took] in: (i) Opposing an argument of unpatentability relied on by the Office, or (ii) Asserting an argument of patentability." 37 C.F.R. § 1.56 (1992).

16. In traversing the Examiner's May 27, 1998 rejection of claims 1-30 of the '733 application as anticipated by Wagner, the applicants argued that the inclusion of various trading states in their Invention made the Invention novel. (Findings of Fact ["FF"] at ¶¶ 28-29.)

17. However, the Super System contained several of the very trading states that the applicants argued were novel. (FF at ¶¶ 17, 31-32.) While I do not find that the Super System necessarily anticipated the invention of the '733 application, I do find that the Super System is and was prior art material to the '733 application. The disclosure of the Bid/Offer State, the Workup state, the Workdown state, and the When state in the Super System is inconsistent with the arguments that the applicants made in opposing the PTO's arguments of unpatentability, and is likewise inconsistent with the arguments that the applicants made in asserting patentability. Thus, I find that the Super System is material.

18. I further conclude that the Super System was highly material to the '733 application because, beyond being inconsistent with the arguments the applicants made regarding patentability, the Super System directly contradicted those arguments. While the applicants argued that the inclusion of trading states made their invention novel, and thus patentable over the prior art, the Super System, which had been in use in Cantor Fitzgerald's trading

rooms starting in 1993, contained the very trading states which the applicants urged were novel. The Super System was thus highly material prior art.

b. Knowledge Chargeable to the Applicants

19. The applicants unquestionably knew about the Super System; It was developed by them and other eSpeed employees for use in Cantor Fitzgerald's trading rooms. (FF at ¶¶ 14-16, 21.)

c. Intent to Mislead the PTO

[14] 20. eSpeed argues, however, that the Super System was not used commercially, and that it thus "did not occur" to the applicants to cite it to the PTO. (FF at ¶ 26.) More particularly, eSpeed argues that, because the Super System was used as an internal order entry system that was never shown to the public, its use was secret, and not commercial. That assertion is simply not credible, in part because it is clear that the Super System was in fact used commercially. eSpeed used the Super System to support trading in the Bills and Canadian Rooms. (FF at ¶ 21.) It is well settled that "a commercial use is a public use even if it is kept secret." *Kinzenbaw v. Deere & Co.*, 741 F.2d 383, 390 (Fed.Cir.1984). Even if no one other than eSpeed's employees ever saw or used the Super System, its use was still commercial, because eSpeed used it in its business. *Kinzenbaw*, 741 F.2d at 390-91 (finding commercial use when Defendant had farmers test farm equipment in secret). Furthermore, there are additional facts that support a finding of deceptive intent.

21. The applicants' claim that it did not occur to them to cite the Super System to the PTO is unbelievable because of the obviously high materiality of that prior art, and the roles they themselves claim they had in its creation. The Super System was a computer system in the same line of systems as the invention disclosed in the '733 application. (FF at ¶¶ 13-25.) It was essentially described in the "Background of the Invention" section of the '974 patent. (FF at ¶ 27; *see also* FF at ¶ 34.) Indeed, the term "Super System" was

used to refer to all of the trading systems developed by Cantor Fitzgerald in the early to mid-1990s, including the invention disclosed in the '974 patent. (FF at ¶ 22 & n. 11.) eSpeed invested significant effort and resources in the development of these systems, which supported the business of its parent corporation. It strains credulity to the snapping point to claim that this earlier stage in their systems development simply slipped the applicants' minds.

22. Furthermore, when the initial discussions about patenting eSpeed's computer trading system took place in 1996, Howard Lutnick stated "I've wanted to Patent our Super System & Its rules (in general) for over a year." (PX110.) It appears, then, that the applicants themselves referred to their development efforts as being the Super System. Thus, I find that the applicants intended to mislead the PTO by failing to disclose the Super System.

23. Having found the threshold levels of materiality and intent, I must now weigh the evidence to determine whether a finding of inequitable conduct is warranted. In light of the applicants' argument during the prosecution of the '733 application that their invention was patentable because of the inclusion of new trading states, the fact that the Super System contained most if not all of the trading states that the applicants claimed were novel shows that the Super System was highly material. The applicants commercially used the Super System in their trading rooms. When it came time to patent their development efforts, they expressly referred to their development efforts as the Super System. They knew that the Super System contained the trading states they claimed were novel, and yet, incredibly, they later told the PTO that it did not occur to them to cite the Super System as prior art. I am thus compelled to find an inference of Intent to withhold highly material information from the PTO during the prosecution of the '733 application. Weighing all of the evidence, I conclude that Brokertec has shown by clear and convincing evidence that the applicants committed inequitable conduct in the prosecution of the '733 application.

d. Inequitable Conduct in the Prosecution of the '733 application renders the '580 patent

Unenforceable

i. Inequitable Conduct in the Prosecution of the '733 application infects the '580 patent

[15][16] 24. "The duty of candor extends throughout the patent's entire prosecution history." *Fox Indus., Inc. v. Structural Preservation Sys., Inc.*, 922 F.2d 801, 804 (Fed.Cir.1990). Inequitable conduct during the prosecution of a patent application can therefore render unenforceable not only the claims of that patent, but claims that issue from related applications as well. *See, e.g., Fox Indus., Inc.*, 922 F.2d at 804 ("a breach of the duty of candor early in the prosecution may render unenforceable all claims which eventually issue from the same or a related application"); *Truth Hardware Corp. v. Ashland Prods., Inc.*, No. Civ. A. 02-1541-GMS, 2003 WL 22005839, at *1 (D.Del. Aug.19, 2003) (quoting *Keystone Driller Co. v. General Excavator Co.*, 290 U.S. 240, 245-46, 54 S.Ct. 146, 78 L.Ed. 293 (1933)) ("[i]t is well-settled that a patentee's Inequitable conduct renders unenforceable all patent claims having 'an immediate and necessary relation' to that conduct, regardless of whether the claims are contained in a single patent or a series of related patents").

[17] 25. However, inequitable conduct in a patent application does not automatically render unenforceable all of the claims of all later issued patents in the same chain. Instead, the inequitable conduct that occurred earlier in the chain "must be related to the targeted claims of the ultimately-issued patent or patents sought to be enforced." *Semiconductor Energy Lab., Inc. v. Samsung Elecs. Co.*, 24 F.Supp.2d 537, 543 (E.D.Va.1998) (citing *Baxter Int'l, Inc. v. McGaw*, 149 F.3d 1321, 1332 (Fed.Cir.1998); *Consol. Aluminum Corp. v. Foseco Int'l Ltd.*, 910 F.2d 804, 809-11 (Fed.Cir.1990)). Thus, a patent that issues from a divisional or continuation application may be held unenforceable where (i) there is inequitable conduct with respect to the prosecution of an earlier related application in the chain leading to the challenged patent and (ii) the inequitable conduct relates to the asserted claims of that patent. Were this not the rule, a party

committing inequitable conduct could avoid the consequences of that conduct through a scheme of divisional and continuation applications. The law does not countenance such a manipulation of the patent process.

Truth Hardware Corp., 2003 WL 22005839, at *1 (citing *Semiconductor Energy Lab.*, 24 F.Supp.2d at 543-44).

[18] 26. The '974 patent and the '580 patent are closely related. The disclosures of the two patents are strikingly similar, and the claims of the '974 patent are likewise similar to asserted claims 20-23 of the '580 patent. (See FF at ¶¶ 34.) Both patents claim a method of trading that comprises various trading states, including a "Bid/Offer state" where a passive participant enters a bid or offer, and a method for distributing these bid and offer positions to other participants in the trade. (DX288 at 00212, the '580 patent at col. 20, Ins. 4-10; DX9, the '974 patent, at col. 18, Ins. 1-10.) Both patents further describe a transition into a trading state when an aggressor hits the bid or lifts the offer. (DX288 at 00212, the '580 patent at col. 20, Ins. 12-20; DX9, the '974 patent, at col. 18, Ins. 11-21.) Additionally, as earlier indicated (*supra* at Conclusions of Law ["CL"] ¶¶ 15-18) and more fully described below, the Super System is highly material prior art to the '580 patent. (See *infra* at CL ¶ 36.) Finally, the '580 patent claims priority from the '733 application. (DX288 at 00188, the '580 patent.) As a result of the close relation of the asserted claims of the '580 patent to the claims of the '974 patent, the inequitable conduct committed during the prosecution of the '733 application, which matured into the '974 patent, infects the '580 patent, rendering it unenforceable.

ii. *eSpeed failed to cure the inequitable conduct committed during the prosecution of the '733 application.*

27. Even where an applicant has committed inequitable conduct during the prosecution of a patent application, it is possible for that applicant to cure the inequitable conduct under certain limited circumstances. *Rohm & Haas Co.*, 722 F.2d at

1571-72. Simply disclosing a withheld relevant prior art reference or accurate facts is not enough, as "settled authority makes clear that the duty of candor requires more to cure inequitable conduct." *Semiconductor Energy Lab.*, 24 F.Supp.2d at 544. To cure earlier inequitable conduct, an applicant must (1) "expressly advise the PTO of [the] existence [of the misrepresentation], stating specifically wherein it resides"; (2) "if the misrepresentation is of one or more facts, the PTO is to be advised what the actual facts are, the applicant making it clear that further examination in light thereof may be required"; and (3) "on the basis of the new and factually accurate record, the applicant must establish patentability of the claimed subject matter." *Rohm & Haas*, 722 F.2d at 1572.

28. Where the alleged inequitable conduct is not an affirmative misrepresentation to the PTO of facts, but is instead the withholding of a material prior art reference, district courts are split on whether an applicant must follow all of the requirements of *Rohm & Haas*. Compare *Semiconductor Energy Lab.*, 24 F.Supp.2d at 544-45 (finding that inequitable conduct in prior applications was not cured by applicants simply disclosing relevant reference, correct figures, and foreign applications) with *Applied Materials Inc. v. Advanced Semiconductor Materials America Inc.*, 30 U.S.P.Q.2d 1967, 1969 (N.D.Cal.1994) (finding that inequitable conduct committed in abandoned application was cured by citation of reference in a continuation application). In at least one case, it has been held that, when there is "delayed disclosure, the materiality of the delay, not the materiality of the reference must be assessed." *Applied Materials*, 30 U.S.P.Q.2d at 1969.

29. Here, the applicants were required to do more to cure the inequitable conduct associated with the '733 application than simply disclose the Super System. This case is distinguishable from *Applied Materials*, since that case involved a patentee abandoning an application tainted by inequitable conduct, and then disclosing the withheld reference in a later application. *Applied Materials*, 30 U.S.P.Q.2d at 1968-69. Instead, the present situation is more akin to *Semiconductor Energy Lab.*, in which an applicant had not disclosed a

material prior art reference, or proper figures, in the prosecution of two patent applications leading to an issued patent. *Semiconductor Energy Lab.*, 24 F.Supp.2d at 544. During the prosecution of a later related application, however, the applicant simply disclosed the previously withheld reference and proper figures. *Id.* The court found that the applicant had not cured the inequitable conduct as required by *Rohm & Haas*. *Id.* at 544-45. In the case at bar, the applicants never attempted to correct the non-disclosure of the Super System during the prosecution of the '733 application, and did not later attempt to correct the non-disclosure of the Super System until February of 2002, nearly three years after the '526 application was filed.

30. Furthermore, the present situation is even more egregious than the situation in *Semiconductor Energy Lab.*, since even when the applicants did disclose the Super System to the PTO, they made material misrepresentations to the PTO about the Super System that also amounted to Inequitable conduct. (See *infra*, at CL ¶¶ 33-39.) eSpeed never disclaimed the '974 patent. Therefore, although the applicants disclosed the existence of the Super System during the prosecution of the '580 patent, this disclosure alone did not cure the inequitable conduct committed during the prosecution of the '733 application.

31. Thus, because this situation is more akin to, and in fact more egregious than, the situation in *Semiconductor Energy Lab.*, and distinguishable from the situation in *Applied Materials*, I conclude that, to have cured the inequitable conduct committed during the prosecution of the '733 application, eSpeed must have met all of the requirements of *Rohm & Haas*, and it did not. The Super System was never disclosed during the prosecution of the '733 application, and, when it was disclosed during the prosecution of the '526 application, the applicants made a material misrepresentation regarding the Super System. (See FF at ¶¶ 26, 35-37; CL at ¶ 36.) Additionally, because there was never a full disclosure of the Super System to the PTO, the applicants never established the patentability of the invention claimed in either the '974 patent or the '580 patent over the Super System.

32. I therefore conclude that the '580 patent is unenforceable because of the inequitable conduct committed during the prosecution of the '733 application.

3. Inequitable Conduct during the Prosecution of the '526 Application

33. The '580 patent is also unenforceable because of additional inequitable conduct that occurred during the prosecution of the '526 application.

34. As earlier noted (*supra*, FF at ¶ 35), each of the three applicants filed a declaration with the PTO during the prosecution of the '580 patent disclosing the Super System. In these declarations, the inventors asserted that the Super System did not contain any code for the “new rules” of trading. (FF at ¶ 36.)

35. However, the Super System did in fact contain “new rules” of trading, as shown by the source code and documents submitted along with the inventors' declarations. (FF at ¶¶ 37-39.)

a. Materiality of Misrepresentation

36. Although the “new rules” in the Super System and the “new rules” patented in the '580 patent may have limited exclusivity in different ways, both limited exclusivity in order to increase liquidity. (FF at ¶¶ 38-40.) Limiting exclusive trading to increase liquidity was one of the primary objects, perhaps the primary object, of the '580 patent. (DX288 at 00204, the '580 patent at col. 4, Ins. 38-41.) In fact, eSpeed's lead witness repeatedly emphasized the importance of the “new rules” to the invention, and asserted that this was the novelty of the '580 patent. (Lutnick, Tr., Vol. 2 at 464:8-23 (stating that the old rules of Workup, where each participant in the trade had exclusive rights “were just too slow ... we would end up with a computer system that was just going to be too slow. So we decided [to] ... basically dispense with everything past the first two players ... the first buyer and the first seller ... [would have] the option to keep buying to work up the trade ... So that speeded it

along ... it still encouraged liquidity”); *see also id.* at 466:3-8; *id.* at 486:20-24; Tr., Vol. 3 at 750:24-751:1; *id.* at 854:18-20.) However, by eSpeed's own admission, exclusivity was granted by “new rules” in the code of the Super System. (PX33 at B002594-95.) Whether this code was activated or not, the applicants knew that the Super System contained the code. Thus, this misrepresentation was highly material.

b. Intent

[19] 37. eSpeed argues that there was no intent to hide the fact that the Super System contained new rules, as it provided various exhibits to the PTO, along with the applicants' declarations. (Oral Arg. Tr. at 44:25-45:5.) However, the declarations and exhibits amounted to over two thousand pages, and the references to the new rules in the Super System were not pointed out to the examiner. (FF at ¶¶ 37-38.) That blizzard of paper is therefore more consistent with an intent to hide than to disclose, on this record.

38. Moreover, the declarations are worded in a manner that would lead the examiner to believe that there were no “new rules” in the Super System. (FF at ¶ 36.) The logical conclusion, based on clear and convincing evidence, is that the applicants intended to hide the Super System from the PTO, as that is the “natural consequence” of the misrepresentations made in the applicants' declarations. *Molins PLC*, 48 F.3d at 1180. Mischaracterizing a reference in a way that misleads the PTO has been found to amount to inequitable conduct. *See Molins PLC*, 48 F.3d at 1184 (citing *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc.*, 359 F.Supp. 948, 965 (D.C.Fla.1972)). The conduct here goes beyond simply mischaracterizing the Super System. The applicants misleadingly indicated that the Super System did not contain new rules, while submitting documentation that showed the contrary. (FF at ¶¶ 36-39.) This fact, combined with the high materiality of the Super System, amply supports an inference of intent. Thus, I find that there was intent on the part of the applicants to mislead the PTO during the prosecution of the '526 application.

39. Having found the threshold levels of materiality and intent, I must now balance the equities and determine if there was inequitable conduct. In light of eSpeed's own emphasis on the criticality of the new rules of exclusivity, the decision to withhold from the PTO information showing that the Super System contained new rules shows high levels of both materiality and intent. The declarations that eSpeed submitted to the PTO, which falsely indicated that the Super System did not contain new rules, further show the high level of intent associated with the applicants' misleading behavior. I thus conclude, after weighing all of the evidence, that Brokertec has met the clear and convincing evidence standard required to show inequitable conduct. Therefore, I find that the applicants for the '580 patent committed inequitable conduct in prosecuting the application for that patent, and that consequently the '580 patent is unenforceable.

40. This finding of inequitable conduct is independent of the inequitable conduct associated with the '733 application. Either of these findings is sufficient to lead to the conclusion that the '580 patent is unenforceable.

B. Laches

[20] 41. Brokertec also asserts that eSpeed's claims against it are barred by laches. “[T]o invoke the laches defense, a defendant has the burden to prove two factors: (1) the plaintiff delayed filing suit for an unreasonable and inexcusable length of time from the time the plaintiff knew or reasonably should have known of its claim against the defendant, and (2) the delay operated to the prejudice or injury of the defendant.” *A.C. Aukerman Co. v. R.L. Chaides Const. Co.*, 960 F.2d 1020, 1032 (Fed.Cir.1992).

[21] 42. Brokertec's argument on laches is noteworthy primarily because it shows that this has been no-holds-barred litigation. Here, the '580 patent issued on May 6, 2003, and this suit was brought the next month. (DX288 at 00188.) Obviously, there was no unreasonable delay in bringing this suit.

C. Exceptional Case and Attorneys' Fees

43. "The court in exceptional cases may award reasonable attorney fees to the prevailing party." 35 U.S.C. § 285.

44. Brokertec was the prevailing party in this case. Although the jury found that Brokertec's product contained all the elements of the asserted claims of the '580 patent, it also found that the '580 patent was invalid for lack of written description. (D.I. 643; Tr., Vol. 11, at 3014:12-3015:20.) Additionally, I have found here that eSpeed committed inequitable conduct in procuring the '580 patent. Thus, eSpeed was entitled to take nothing at the end of this case, and Brokertec is the prevailing party.

45. "The determination of whether a case is exceptional and, thus, eligible for an award of attorney fees under § 285 is a two-step process. First, the district court must determine whether a case is exceptional ... After determining that a case is exceptional, the district court must determine whether attorney fees are appropriate." *Phonometrics, Inc. v. Westin Hotel Co.*, 350 F.3d 1242, 1245 (Fed.Cir.2003).

[22] 46. "The prevailing party may prove the existence of an exceptional case by showing: inequitable conduct before the PTO; litigation misconduct; vexatious, unjustified, and otherwise bad faith litigation; a frivolous suit or willful infringement." *Epcon Gas Sys., Inc. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1034 (Fed.Cir.2002) (citing *Hoffmann-La Roche Inc. v. Invamed Inc.*, 213 F.3d 1359, 1365 (Fed.Cir.2000)).

47. I have determined that Brokertec has shown by clear and convincing evidence that eSpeed committed inequitable conduct before the PTO in procuring the '580 patent. Thus, I find that this is an exceptional case, and turn now to the question of attorneys' fees.

[23] 48. "Even an exceptional case does not require in all circumstances the award of attorney fees." *S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 201 (Fed.Cir.1986). "In the context

of fee awards to prevailing accused infringers, we have observed that § 285 is limited to circumstances in which it is necessary to prevent 'a gross injustice' to the accused infringer[.]" *Forest Laboratories, Inc. v. Abbott Laboratories*, 339 F.3d 1324, 1329 (Fed.Cir.2003) (internal citations omitted). To determine whether attorneys' fees are warranted, a trial judge should "weigh considerations such as the closeness of the case, the tactics of counsel, the conduct of the parties, and any other factors that may contribute to a fair allocation of the burdens of litigation as between winner and loser." *Id.*; see also *Superior Fireplace Co. v. Majestic Prods. Co.*, 270 F.3d 1358, *1378 (Fed.Cir.2001) (quoting *Nat'l Presto Indus., Inc. v. West Bend Co.*, 76 F.3d 1185, 1197 (Fed.Cir.1996)) (the "decision to award attorney fees, *vel non*, is discretionary and 'permits the judge to weigh intangible as well as tangible factors: the degree of culpability of the infringer, the closeness of the question, litigation behavior, and any other factors whereby fee shifting may serve as an instrument of justice.'").

49. This was a hard fought case with a split verdict. The jury found that the '580 patent covered the accused device, but was invalid. (See *supra* at 1.) The issue of inequitable conduct was likewise hard fought. While I have concluded that Brokertec succeeded in developing evidence sufficient to meet its burden of proof as to inequitable conduct, that does not mean the case was "open and shut" from the start. A finding of inequitable conduct and, consequently, unenforceability, does not automatically mean that an award of fees is appropriate. See *Consol. Aluminum Corp.*, 910 F.2d at 815 (affirming district court decision to deny attorneys' fees request despite finding of inequitable conduct, stating that this ruling was in accord with the "repeated statement that not every case deemed 'exceptional' must result in a fee award"); *C.R. Bard, Inc. v. Advanced Cardiovascular Sys., Inc.*, 28 U.S.P.Q.2d 1852, 1993 WL 329978, at *5 (Fed.Cir.1993) (same, stating "[i]nequitable conduct before the PTO does not necessarily warrant the award of attorney fees"); *Nat'l Diamond Syndicate, Inc. v. Flanders Diamond USA, Inc.*, No. 00 C 6402, 2003 WL 21663673, at *7 (N.D.Ill.2003) ("this Court concludes that the Defendants' conduct, although it satisfies the

standard for inequitable conduct, falls short of the level of culpability necessary for a finding of exceptional circumstances which would support an award of attorney's fees").

50. As to the tactics of counsel, the manner in which counsel for eSpeed litigated this case certainly cannot be characterized as warranting fee shifting. I note that, to the contrary, eSpeed's counsel were admirably professional and effective in the face of what were, at times, hyper-aggressive defense tactics. Indeed, one of the primary factors which makes fee shifting inappropriate in this case is the time and effort which the plaintiffs and the court were required to spend addressing issues which ought never have been raised, the laches defense being only one example.

51. Thus, despite my conclusion that eSpeed committed inequitable conduct in procuring the '580 patent, and my finding that this is an exceptional case, I decline to award attorneys' fees to Brokertec. In this case, requiring each side to bear its own costs and fees is "a fair allocation of the burdens of litigation as between winner and loser." *S.C. Johnson & Son, Inc.*, 781 F.2d at 201.

IV. CONCLUSION

In summary, for the reasons expressed herein, the '580 patent is unenforceable because it was procured by inequitable conduct committed during the prosecution of both the '733 application and the '526 application. Brokertec's laches defense is meritless. Finally, although the finding of inequitable conduct renders this an exceptional case, an award of attorneys' fees is not warranted here. The parties should confer and submit a proposed form of judgment giving effect to the rulings herein.

FN1. Throughout these Findings of Fact and Conclusions of Law, I have adopted without attribution language suggested by one side or the other in this dispute. In all such instances, the finding or conclusion in question has become my own, based upon

my review of the evidence and the law. To the extent that any of my findings of fact may be considered conclusions of law or vice versa, they are to be considered as such.

FN2. Howard Lutnick is the chairman and chief executive of both Cantor Fitzgerald and eSpeed. (Tr., Vol. 2 at 363:20-23.) Along with Bijoy Paul and Stuart Fraser, Mr. Lutnick is one of the named inventors of the '974 and '580 patents. ('974 patent, DX9 at 1; '580 patent, PX1 at 1.)

FN3. Daniel Cleaves is an employee of Brokertec, who served as its corporate representative for at least a portion of the trial. (Tr., Vol. 4 at 1328:8-18.) From 1987 until 2000, when he went to work at Brokertec, Mr. Cleaves worked as a broker for Liberty Brokerage Investment Corp. (*Id.* at 1328:20-1329:4.)

FN4. Brokers work for companies like Cantor Fitzgerald, and facilitate trades between primary dealers, who are considered customers of the brokers' firms. (Lutnick, Tr., Vol. 2 at 370-71.)

FN5. Traders work for primary dealers, which are mostly large banks. (Lutnick, Tr., Vol. 2 at 372.) When a trader wants to buy or sell a security, he or she contacts a broker, who facilitates a trade between two traders. (*Id.*)

FN6. Bijoy Paul is a former employee of Cantor Fitzgerald, and one of the inventors named on the '974 and '580 patents. (Tr., Vol. 4 at 1079:1-9; '974 patent, DX9 at 1; '580 patent, PX1 at 1.)

FN7. Hitendra Abuwala was employed at Cantor Fitzgerald from 1983 to 1994. (Tr., Vol. 6 at 1926:24-1927:9.) Mr. Abuwala worked on the development of the Super System, along with Neil Silverstein. (*Id.* at 1928:24-1929:23.)

FN8. Marshall Caro was the information technology director at Cantor Fitzgerald between 1992 and 1997. (Tr., Vol. 6 at 2034:16-2035:1.)

FN9. eSpeed referred to the rules described here, which required a customer to show a bid or offer of a certain minimum size to maintain exclusivity, as the “new rules.” (PX33 at B002594-95.) However, eSpeed also referred to rules that limited exclusivity by allowing only the first two participants to trade exclusively as the “new rules.” (Lutnick, Tr., Vol. 2 at 463:14-465:4.) When I use the term “new rules” in these Findings and Conclusions, I’m referring to an exclusivity protocol covering both of these circumstances, since this is how eSpeed itself used the term. The differences between these two sets of rules was never made clear, perhaps because the Super System code was not preserved. eSpeed asserted throughout the trial that it had lost the source code for the original Super System in the terrorist attacks on the World Trade Center on September 11, 2001. (See Lutnick, Tr., Vol. 8 at 2557.) However, Joe Noviello, an eSpeed employee with responsibility for maintaining the code, testified in his deposition that eSpeed, in fact, “lost a very small subset of recent code, which was the last few days ...” in the September 11 attack. (Tr., Vol. 8 at 2559:4-22.) Why and how that source code became unavailable has never been explained. (See Tr., Vol. 9 at 2902-03) (instructing the jury that “[i]f you find that plaintiffs could have produced other modules of source code, and that such modules were within plaintiffs’ control at a time when plaintiffs had a legal obligation to preserve them, and that such modules would have been relevant in deciding disputed facts in this case, you are permitted, but not required, to infer that such modules of source code would have been unfavorable to plaintiffs.”).

FN10. Stuart Fraser served as Vice Chairman of Cantor Fitzgerald Securities. (DX3 at ¶ 2.) Mr. Fraser is one of the inventors named on the ‘974 and ‘580 patents. (‘974 patent, DX9 at 1; ‘580 patent, PX1 at 1.)

FN11. Neither party ever addressed whether there was a CFTS version 1.0, and, if so, what happened to that version. Although, at times, employees of eSpeed used the term “Super System” loosely to refer to any version of CFTS, references to the “Super System” in these Findings and Conclusions are to CFTS 2.0, unless the context demonstrates otherwise.

FN12. Because the source code for early versions of CFTS is missing (*see supra*, n. 9), it is impossible to say whether there are other similarities between the trading states in the Super System and the system disclosed in the ‘974 patent.

FN13. The ‘526 application claimed priority from the ‘733 application, and, as was noted earlier, eventually matured into the ‘580 patent. (Findings of Fact [“FF”] at ¶¶ 3-4.)

FN14. “In 1992, the definition of materiality in 37 C.F.R. § 1.56 was revised ... According to the PTO’s notice of final rulemaking, the rule change applied to all applications pending or filed after March 16, 1992.” *Bruno Indep. Living Aids, Inc.*, 394 F.3d at 1352.

FN15. In a very recent case, however, the Federal Circuit has noted that perhaps the “new” standard set out in the PTO regulations is more narrow than the older “reasonable examiner” standard. *See Digital Control Inc. v. The Charles Machine Works*, 437 F.3d 1309, 1316-17 (Fed.Cir.2006). However, the Court also noted that both the “new” standard and the “reasonable examiner” standard are appropriately used in making a

determination of materiality. *Id.* Indeed, although I apply the “new” standard here, were I to apply the broader “reasonable examiner” standard, I would reach the same result.

FN16. Even in the absence of additional facts, the absence of a credible explanation for failing to disclose highly material prior art in circumstances such as this should, perhaps, be sufficient for a showing of intent. *See Bruno Indep. Living Aids, Inc.*, 394 F.3d at 1354 (“in the absence of a credible explanation, intent to deceive is generally inferred from the facts and circumstances surrounding a knowing failure to disclose material information”). However, it may be that more is required. *See Purdue Pharma L.P.*, 438 F.3d at 1133-34 (“Intent to deceive, however, cannot be ‘inferred solely from the fact that information was not disclosed; there must be a factual basis for a finding of deceptive intent.’”). I therefore rely on the applicants’ own involvement in the Super System’s development and their references to it throughout the creation of the trading systems eventually patented as further support for my finding of intent. (*See infra* at ¶ 21.)

FN17. The applicants made this assertion in declarations that they filed during the prosecution of the ‘526 application. (DX3 at ¶ 26; DX23A at ¶ 20; DX24 at ¶ 7.) I rely on these statements here not for their relevance to the prosecution of the ‘526 application, but for what the applicants assert was their state of mind during the prosecution of the ‘733 application.

FN18. Again, the unexplained disappearance of the Super System source code makes it impossible to know just how extensive the “new rules” overlap was. (*See supra* at n. 9.)

FN19. I emphasize that this is only one example. While I have not culled the

record for every such example, there are additional places in the record where Brokertec’s approach to the case caused eSpeed and the court to spend time addressing issues that should not have been raised. For example, in their post-trial motion for judgment as a matter of law on non-infringement, Brokertec argued that, to prove infringement, eSpeed was required to show not only that the accused device fit literally within the words of the claim, but also that “ ‘the alleged infringer ... reached [the same result as the patentee] by substantially the same or similar means.’ ” (D.I. 652 at 40) (citing *Westinghouse v. Boyden Power-Brake Co.*, 170 U.S. 537, 569, 18 S.Ct. 707, 42 L.Ed. 1136 (1898)). In support of this argument, Brokertec relied on *Westinghouse* and other cases from the late nineteenth and early twentieth centuries, and failed to cite any cases from later than 1929 in support of their position. (D.I. 652 at 36.) As was made clear in my Memorandum Order denying their motion for judgment as a matter of law, Brokertec did “nothing to refute the modern understanding of infringement” and did “not dispute that the [accused] system literally corresponds with the words of claims.” (D.I. 672 at 15.)

D.Del.,2006.

eSpeed, Inc. v. Brokertec USA, L.L.C.

417 F.Supp.2d 580

Briefs and Other Related Documents (Back to top)

- 2004 WL 3656266 (Trial Pleading) First Amended Complaint for Patent Infringement (Aug. 30, 2004)
- 1:03cv00612 (Docket) (Jun. 30, 2003)

END OF DOCUMENT